

ON A NEW GENUS AND SPECIES OF
COCCIDAE FROM NORTH-WESTERN INDIA
AND EASTERN PERSIA.

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(With Plates XXI—XXII.)

Genus *Naiacoccus*, nov.

Characters as in *Erium* (of the subfamily Pseudococcinae): but with an enormously elongated ovisac, within the anterior extremity of which the adult insect lies concealed. Type *serpentinus*, Green.

Naiacoccus serpentinus, sp. nov.

Adult female occupying the extremity of a long, white, tubular ovisac which may form either a simple loop or be twisted into an irregular coil (see fig. 1). When uncoiled and extended the ovisac may attain a length of approximately one and three-quarter inches, the average length being well over one inch.

Adult female, removed from the ovisac, dull slaty grey or purplish brown: broadly ovoid when viewed from above (fig. 2*b*): irregularly tumescent when viewed from the side (fig. 2*a*): the dorsal area of the abdomen contracted and transversely wrinkled, the posterior segments assuming a dorsal position. Antennae small, 7- to 9-jointed (see fig. 3), the proportionate lengths of the several joints varying considerably. The normal number is apparently 8 (fig. 3*b*, *c*, *d*), the larger number (fig. 3*a*) being exceptional and produced by a fracture of the normal 4th joint, while the smaller number has presumably resulted from the fusion of two joints (fig. 3*f*). In some instances the division between the 7th and 8th is incomplete (see fig. 3*e*). Apex of terminal joint truncate or obtuse, with 5 or 6 stout hairs: each of the remaining joints usually with 1 or 2 small hairs on one side. Limbs small but comparatively stout (fig. 4): the tibia and tarsus together markedly shorter than the femur and trochanter; coxa unusually large, especially in some examples (see fig. 4*b*); digitules simple. Anal ring (fig. 5) with 6 stout setae: some smaller setae immediately above and below the anal aperture. Anal lobes inconspicuous, represented by two small rounded prominences on the dorsum—one on each side of, and slightly below the anal aperture (see fig. 2*b*). Spines of the form shown at fig. 5*b* occur in transverse series across the dorsum of the abdominal segments—sparsely on the basal but more numerous on the

posterior segments. Similar spines are clustered on the small anal lobes and on a corresponding tract on the preceding segment. Intermingled with the spines are many minute, obscurely trilocular pores, which occur (rather more abundantly) on the venter also. There are some larger circular pores near the posterior extremity of the venter. Length (under compression) 2.5 to 4 mm. Breadth 2 to 3 mm.

The early adult insect (before the production of the ovisac) is enclosed in a more compact, felted covering, of a grayish ochreous colour, which may be observed—even in older examples—as a pointed cap at the anterior extremity of the ovisac. The freshly deposited eggs are of a pale yellow colour, but become reddish before hatching. The number of ova produced by a single female probably amounts to several thousands.

On a large arboreal Tamarisk (*Tamarix articulata*). Lahore. Collected by Dr. N. Annandale in May. “*T. articulata* is one of the chief shade-trees in Lahore. Mr. Sundar Lal Hora, M.Sc., Research Assistant, Z.S.I., found the Coccid upon it in abundance in October, but I have failed to do so on several occasions in January. N. A.”

The extraordinary masses of tangled ovisacs must be very conspicuous objects on the trees, but might easily be mistaken for collections of bird droppings, such as may often be seen on branches beneath the roosting places of flocks of sparrows. The insects excrete a considerable amount of viscid fluid which soon assumes a brownish colour.

Lt.-Col. Stephenson (of the Government College, Lahore), to whom I am indebted for some excellent photographs of the insect and for fresh living material, informs me that—in nature—the long ovisac is always attached at each end, forming a simple loop. The subsequent tangled condition may be the result of wind.

Naiacoccus serpentinus var. *minor*, nov.

Distinguishable from the type by its smaller size and by the greater number of dorsal spines and dermal pores (fig. 6f). The circular pores of the venter are particularly conspicuous and are densely crowded on the posterior segments (see fig. 6g). The average size of the insect ranges from 1.5 to 3 mm.; but little difference can be observed in the length of the ovisacs which have precisely the same appearance as those of typical *serpentinus*. The antennae (figs. 6a-d) are shorter, the number of joints varying from 5 to 7, being usually reduced by complete or partial fusion. In some examples only 5 complete joints can be distinguished; but the 6-jointed form (fig. 6b, c) is the most frequent.

On *Tamarix stricta*. Collected by Dr. N. Annandale in two localities several hundred miles apart, viz.:—

No. 8740, “In desert north of Nasratabad in Seistan, Eastern Persia; November. The roots and stems of *T. stricta*, which

rarely grows larger than a small bush, are the chief source of fire-wood in Seistan."

No. 8745, "From Kushdil Khan, in the Pishin District north of Quetta, Baluchistan; December."